Toolkit: Sodium/Salt Reduction

A Case for Change

National Facts:

- The 2010 Dietary Guidelines for Americans recommend limiting sodium to less than 2,300 milligrams (mg) per day (about 1 teaspoon of table salt). Individuals with hypertension, African Americans, and adults aged 51 and older should limit intake to 1,500 mg of sodium per day.¹
- The 1,500 mg recommendation applies to about half of the US population, including children and the majority of adults.¹
- The average daily sodium intake for Americans age 2 years and older is more than 3,400 mg.¹
- Research strongly shows a direct correlation relationship between consuming excess sodium and elevated blood pressure and that even small reductions in sodium intake lowers blood pressure and helps prevent the development of hypertension.²
- Having high blood pressure or hypertension is a major risk factor for heart disease and stroke, the first and third leading causes of death in the United States.^{2,3}
- Nearly 2,000 Americans die from cardiovascular disease each day, an average of 1 death every 41 seconds.⁴
- Cardiovascular disease (CVD) and stroke costs the United States an estimated \$297.7 billion annually in direct and indirect costs, including health care services, medications, and lost productivity.³

Iowa Facts:

- Heart disease and stroke are the #1 and #3 killers of lowa men and women. 5,6
- In 2011, 6,726 lowans died of heart disease and 1,431 died of a stroke ⁶, accounting for 29% of deaths in lowa. ⁷
- Cardiovascular disease accounted for 14 percent (one in seven) of lowa's hospitalizations in 2009, the leading cause of hospitalizations. ⁵ Of those CVD-related hospitalizations:
 - o 61% were diagnosed with heart disease (29370)⁵;
 - 27% had coronary heart disease (13,000)⁵;
 - 19% had congestive heart failure (9,148).
 - 18% were diagnosed with stroke (8,511).
- In 2011, the age-adjusted heart disease death rate for lowans was 14% higher than the national Healthy People 2020 objective (118 /100,000 lowa deaths vs. the 101/100,000 deaths national objective). With 131/100,000 lowan deaths in 2009, the 2011 rate represents a 10% reduction in two years, lowa is on its way to meeting the 2020 objective if trends continue. 6

Sources:

- 1. US Department of Agriculture and US Department of Health and Human Services. <u>Dietary quidelines for Americans</u> <u>2010</u>. Washington DC, US: US Government Printing Office; December 2010.
- 2. Centers for Disease Control and Prevention (CDC). <u>Vital Signs: Prevalence, Treatment, and Control of Hypertension United States, 1999-2002 and 2005-2008.</u> MMWR. 2001; 60(Early Release).
- 3. Roger, VL, Go AS, Lloyd-Jones DM, et al. <u>Heart disease and stroke statistics--2012 update: A report from the American Heart Association</u>. *Circulation*. 2012;125: e2-e220.
- 4. Kochanek KD, Xu J, Murphy SL, Miniño AM, Kung HC. <u>Deaths: Final Data for 2009</u>. *National Vital Statistics Report*. 2011. 60(3).
- 5. Iowa Department of Public Health (IDPH). <u>Coronary heart disease in Iowa</u>. *Iowa Chronic Disease Report Supplement:* 2011. Heart Disease and Sroke Prevention Program.
- 6. Iowa Department of Public Health (IDPH). <u>Stroke in Iowa</u>. Iowa Chronic Disease Report Supplement: 2011. Heart Disease and Stroke Prevention Program.
- 7. Iowa Department of Public Health. What We Do Profiles Heart Disease and Stroke. Data updated bi-annually.

This Sodium/Salt Reduction Toolkit was created to provide healthcare providers with the most current and comprehensive resources and knowledge-base available regarding sodium/salt reduction as a means to reduce high blood pressure, in keeping with the Centers for Disease Control and Prevention's featured message. With these resources, the lowa Department of Public Health, Bureau of Chronic Disease Prevention and Management, Heart Disease and Stroke Program (HDSP) is confident that healthcare providers will be able to increase the quantity and quality of provider-initiated education to their patients with pre-hypertension and hypertension. The HDSP program also encourages healthcare providers to become advocates in their communities in promoting heart-healthy and stroke-free communities and supporting population-based policy change in regards to sodium consumption.

Why should Healthcare Providers promote heart-healthy and stroke-free communities?

Health care leaders can play an important role in protecting the health of people in their care. Remember that your patients see you as an expert and trust your advice. The following are some actions you can take to promote heart-healthy and stroke-free initiatives in all healthcare settings:

1. Demonstrate leadership

- Apply guidelines and make referrals for all heart disease and stroke patients regardless of sex and race or ethnicity.
- Ensure that health care workers are trained in active listening and cultural sensitivity to optimally care for patients of different cultures and backgrounds.
- Partner with community agencies to offer heart disease and stroke prevention screenings and educational events for the public and follow-up counseling and education for those at risk.
- Pledge and support the Million Hearts[™] national and collaborative initiative to reduce 1 million heart attacks and stoke by 2017. For more information and to pledge your support, visit http://millionhearts.hhs.gov/index.html.

2. Implement policies and incentives to promote heart-healthy behaviors

- Institute standardized treatment and prevention protocols that are consistent with national
 evidence-based guidelines to prevent heart disease, stroke, and related risk factors. Examples of
 these guidelines include JNC-7 Guidelines for High Blood Pressure, AHA Guidelines for Primary
 and Secondary Prevention of Cardiovascular Disease and Stroke, and Clinical Practice Guidelines
 for Treating Tobacco Use and Dependence.
- Track changes in health outcomes and cost.
- Implement the Chronic Care Model for primary care settings and track changes in cardiovascular health indicators. For more information, visit http://www.improvingchroniccare.org.
- Provide routine screening and follow-up counseling and education to patients to help prevent
 and control cardiovascular disease risk factors. These risk factors include high blood pressure,
 high blood cholesterol, poor nutrition, physical inactivity, tobacco use, Diabetes, and obesity.

3. Promote coverage for and use of preventive health services

- Institute an electronic medical records system and patient data registries to provide immediate feedback on a patient's condition and compliance with the treatment regimen
- Institute reminder systems to prompt healthcare providers of patients with risk factors for heart disease and stroke to prescribe preventive medication, closely monitor these patients, and encourage them to comply with their treatment and prevention regimen.
- Provide incentives and other support mechanisms to encourage patients and healthcare providers to comply with recommended guidelines for preventing heart disease and stroke.

The actions discussed here are approaches that will bring visibility and support issues of heart disease and stroke; they are interventions that are **evidence-based** through studies and scientific review to support cardiovascular health, and are interventions recommended by CDC's *Guide to Community Preventive Services* or clinical guidelines.

Please do not hesitate to contact the HDSP program with any questions you may have regarding use of the materials in this toolkit.

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This toolkit will:

- Provide Iowa health care providers with educational resources to better inform patients about the health risks associated with high sodium/salt consumption.
- Provide lowa health care providers with evidence and support in order for them to become advocates for policy/environmental change.

Toolkit

Clinical Guidelines and Protocols

A Population-Based Policy and Systems Change Approach to Prevent and Control **Hypertension**. Institute of Medicine (IOM). Published February 2010.

IOM discuses population-based strategies, behavioral/lifestyle interventions and the provider's role to better control hypertension. *Order a copy for \$36.75 from http://www.iom.edu*.

Free PDF download.

http://www.iom.edu/Reports/2010/A-Population-Based-Policy-and-Systems-Change-Approach-to-Prevent-and-Control-Hypertension.aspx

Primary Prevention of Hypertension: Clinical and Public Health Advisory from the National Blood Pressure Education Program. National Heart, Lung, and Blood Institute, National High Blood Pressure Education Program. Published November 2002.

A publication of the latest guidelines, advisories, and statements for clinical and public health professionals regarding the primary prevention of hypertension.

Free PDF download.

http://www.nhlbi.nih.gov/health/prof/heart/hbp/pphbp.pdf

The Seventh Report of the Joint National Committee on Prevention Detection, Evaluation, and Treatment of High Blood Pressure (JNC 7). US Department of Health and Human Services, National Institutes of Health, National Heart, Lung, and Blood Institute. Published December 2003.

A current evidence-based recommendation which promotes decreased sodium consumption and asserts that a 1,600 mg sodium eating plan has blood pressure reducing effects similar to drug therapy.

Free PDF available.

http://www.nhlbi.nih.gov/guidelines/hypertension/jnc7full.pdf

Dietary Guidelines for Americans 2010. United States Department of Health and Human Services and the United States Department of Agriculture. Published 2010.

This document is intended to be a primary source of dietary health information for policymakers, nutrition educators, and health providers. *Order a copy for \$12.50 from http://bookstore.gpo.gov* .

Free PDF download.

http://www.health.gov/dietaryguidelines/dga2010/DietaryGuidelines2010.pdf









Implementing Recommendations for Dietary Salt Reduction. National, Heart, Lung and Blood Institute, National, Heart, Lung and Blood Institute Workshop. Published 1996.

A publication from assembled representatives from a variety of disciplines with discussion and recommendations for intervention strategies and materials, monitoring methods, and research directions for dietary salt/sodium reduction.

Free PDF download.

http://www.nhlbi.nih.gov/health/prof/heart/hbp/hbp_salt.pdf

Mention for the Parameter Control Cont

Strategies to Reduce Sodium Intake in the United States. Institute of Medicine (IOM). Published April 2010.

IOM concludes that reducing sodium content in food requires new government standards for the acceptable level of sodium. *Order a copy for \$36.00 from http://www.iom.edu*.

Free PDF download.

http://www.iom.edu/Reports/2010/Strategies-to-Reduce-Sodium-Intake-in-the-United-States.aspx

Strategies to Reduce Sodium Intake in the United States

Vital Signs: Prevalence, Treatment, and Control of Hypertension – United States, 1999-2002 and 2005-2008. *Morbidity and Mortality Weekly Report 60(4); 103-108*. Centers for Disease Control and Prevention. Published February 4, 2011.

Review of data regarding prevalence of treatment, and control of hypertension in the United States and recommendations for a comprehensive approach involving policy and systems changes to improve healthcare access, quality of care, and treatment adherence.

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Free PDF download.

http://www.cdc.gov/mmwr/pdf/wk/mm61e1002.pdf

Application of Lower Sodium Intake Recommendations to Adults – United States 1999-2006. *Morbidity and Mortality Weekly Report.* Centers for Disease Control and Prevention. Published March 27, 2009.

Review of data regarding applicability of lower sodium guidelines for the American population with recommendations for use of sodium reduction measures.

Free PDF download.

http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5811a2.htm

Application of Lower Sedimu Instale Recommendations to Adults —
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Sodium Intake Among Adults – United States, 2005-2006. Morbidity and Mortality Weekly Report 59(24); 746-749. Centers for Disease Control and Prevention. Published June 25, 2010.

Review analysis of excess sodium consumption with recommendations for food manufacturers and retailers to reduce sodium content in foods as means to reduce sodium consumption.

Free PDF download.

http://www.cdc.gov/mmwr/pdf/wk/mm5924.pdf



Usual Sodium Intake Compared with Current Dietary Guidelines – United States, 2005-2008. Morbidity and Mortality Weekly Report 60(41); 1413-1417. Centers for Disease Control and Prevention. Published October 21, 2011.

Report of high levels of sodium consumption among US adults utilizing data from the National Health and Nutrition Examination Survey and related increases in risk for heart disease and stroke.

Free PDF download.

http://www.cdc.gov/mmwr/pdf/wk/mm6041.pdf

Primary Health Care Providers' Attitudes and Counseling Behaviors Related to Dietary Sodium Reduction. Jing Fang, MD, MS; Mary E Cogswell, DrPH, RN; Nora L Keenan, PhD; and Robert K Merritt, MA. American Medical Association. Archives of Internal Medicine 172(1). Published January 9, 2012.

Review of the influence providers play in shaping patient attitudes towards sodium reduction and adherence with prescribed behaviors to reduce consumption.

Available online, full content available to American Medical Association members and/or subscribers.

http://archinte.jamanetwork.com/article.aspx?articleid=1108615

Salt Reduction Lowers Cardiovascular Risk: Meta-analysis of outcome trials. Feng J He and Graham A MacGregor. *The Lancet* 378(9789), pages 380-382. Published July 30, 2011.

Analysis of results from a meta-analysis of sodium reduction randomized trials indicating evidence of substantial benefits of reducing salt in the diet.

Free PDF available.

http://www.actiononsalt.org.uk/news/Salt%20in%20the%20news/2011/58301.pdf







Educational Materials

Provider Education

Sodium Reduction: A Public Health Priority. Kristy Mugavero, RN, MSN, MPH, Centers for Disease Control and Prevention (CDC). Presentation given at CDC HDSP Practitioners Training, September 14, 2011.

A presentation on the role of public health in sodium reduction efforts, detailing success stories of implemented CDC-sponsored Sodium Reduction in Communities (SRC) programs.

Free PDF download.

http://www.orau.gov/hsc/hdspinstitute/2011/session-summaries/presentations/WK08AB Mugavero-Sodium Reduction.pdf



Sodium Reduction: A Public Health Imperative. Darwin Labarthe, M.D., M.P.H., PhD, Director, Division for Heart Disease and Stroke Prevention, National Center for Chronic Disease Prevention and Health Promotion. Presentation given at an American Public Health Association Webinar, May 2010.

A discussion of the urgent need for sodium reduction change, the current sodium climate in the U.S. and speaks about the Institute of Medicine's sodium report.

Free download in PowerPoint format.

http://www.google.com/url?sa=t&source=web&cd=1&ved=0CBIQFjAA&url=http%3A% 2F%2Fwww.apha.org%2FNR%2Frdonlyres%2F33A98C43-C779-4AE5-A64E-655108991FAE%2F0%2FSodium_Labarthe.ppt&ei=FYVZTO-DA93snQeFypmQCQ&usg=AFQjCNETh1dUnX4JCe3tVJZ_vOwnr49ggg

Sodium Reduction: The Current Landscape. Jonathan E. Fielding, M.D., M.P.H., M.B.A., Director of Public Health and Health Officer, L.A. County Department of Public Health, Professor of Health Services and Pediatrics, Schools of Public Health and Medicine, UCLA. Presentation given at an American Public Health Association Webinar, May 2010.

A comparison of the current state of sodium reduction in the U.S. compared to other countries.

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http://www.apha.org/NR/rdonlyres/77E0C4C1-70C3-43B1-AB6E-58B3AD518CD8/0/Sodium Fielding.pdf

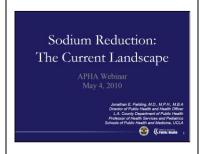
Strategies to Reduce Sodium Intake in the United States. Lawrence J. Appel, M.D., M.P.H. Member IOM Committee on Strategies to Reduce Sodium Intake. Presentation given at an American Public Health Association webinar, May 2010.

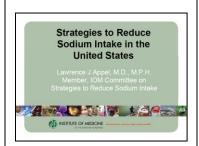
A comparative description of the current state of sodium reduction in the US and outlines strategies to decrease the consumption of sodium by Americans.

Free PDF download.

http://www.apha.org/NR/rdonlyres/3243F264-519D-46BF-ADF3-54D1D4D88647/0/Sodium Appel.pdf







Sodium Reduction: Time for Choice, PowerPoint presentations. Centers for Disease Control and Prevention, Presentation given at the Public Health Grand Rounds presentation, April 21, 2011.

Sodium Reduction: Facts and Fiction. Presenter Darwin R Labarthe MD, MPH, PHD presents detailed information regarding the current status of sodium consumption and risk factors as well as recommendations for sodium reduction and its benefits. *Slides 1-18*.

Salt as a Food Ingredient: Technological Context. Presenter Jeremiah Fasano, PHD provides background on use of salt in food production and possible replacement options for sodium in food manufacturing. *Slides 19-30*.

Monitoring Progress in Sodium Reduction in Foods. Presenter Mary E. Cogswell, DrPH offers some of the epidemiological data surrounding excess sodium consumption and population awareness and readiness to take make changes to reduce salt in the diet. *Slides 31-44*.

National Salt Reduction Initiative: A Voluntary Framework to Reduce Population Sodium Intake. Presenter Christine Johnson, MBA discusses ongoing initiatives aimed at reducing sodium consumption through community and population-based intervention measures, such as the National Salt Reduction Initiative (NSRI). Slides 45-64.

Full PowerPoint presentation available (see specific slide numbers above). http://www.cdc.gov/about/grand-rounds/resources/PHGRSodRed5FINAL.pdf

Sodium Reduction: An Emerging Issue for Heart Disease and Stroke Surveillance. Robert K. Merritt, Chief, Epidemiology and Surveillance Branch, Division for Heart Disease and Stroke Prevention, Centers for Disease Control and Prevention. Presentation given at the 2010 National Conference on Health Statistics, August 16-18, 2010.

Provides comprehensive information regarding excess sodium consumption as risk factor for cardiovascular disease and need for public health attention.

Free PDF download.

http://www.cdc.gov/nchs/ppt/nchs2010/45 Merritt.pdf

National Salt Reduction Initiative: A Voluntary Framework to Reduce Population Sodium Intake. Jeni Clapp, MPA, Nutrition Strategy Program, New York City Department of Health and Mental Hygiene.

Details the National Salt Reduction Imitative components and outlines the framework for population sodium reduction through voluntary engagements with food manufacturers and restaurants.

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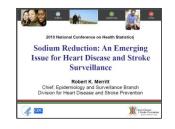
http://www.thenecc.org/images/Clapp2011Summit.pdf

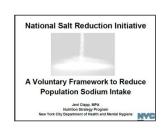












Sodium Reduction in Communities – New York State. Deborah A. Spicer, Healthy Heart Program, New York State Department of Health. Presentation given at HDSP Grantees Meeting, September 2011.

Provides overview and updates on sodium reduction initiatives in two New York State counties Schenectady and Broome, including success in senior meal changes, restaurants, and school meals.

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HDSP Grantees Meeting
September 2011

Sodium Reduction in Communities
New York State

Deborah A. Spicer
Healthy Heart Program, NYS DOH

Sodium Reduction: Sodium Reduction in Communities Program. Misty Jimerson, MS, Community Resources Council. Kansas Department of Health and Environment.

Overview of current community-based sodium reduction initiatives following award of CDC Sodium Reduction in Communities Program (SRCP) grant.

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Indicators Spotlight: Sodium Reduction. Centers for Disease Control, National Center for Chronic Disease Prevention and Health Promotion, Division of Heart Disease and Stroke Prevention. *Document is a draft version*.

Provides useful outline of the use of indicators through the process of planning, implementation, and evaluation of policy and systems change initiatives.

Free PDF available.

http://www.cdc.gov/DHDSP/docs/Sodium Indicators.pdf



Sodium Reduction in Communities Program (SRCP) Logic Model. Centers for Disease Control and Prevention. Sodium Reduction in Communities Program.

Provides valuable overview of population-based sodium reduction championed by the CDC's SRCP program and offers examples of current efforts in action.

Free PDF available.

http://www.cdc.gov/DHDSP/docs/Sodium Reduction Communities Overview.pdf



Sodium: Point/Counterpoint. Centers for Disease Control, Heart Disease and Stroke Prevention. Published May 2010.

A document for health program staff and partners to anticipate and respond to possible questions about sodium reduction.

Free PDF download.

https://www.ndhealth.gov/heartstroke/toolkit/Sodium Point Counterpoint 5-24-10.pdf



Sodium: Q&A. Centers for Disease Control, Heart Disease and Stroke Prevention. Published May 2010.

Provides answers to common and general questions about sodium reduction (for health care providers and patients).

Free PDF download.

http://www.cdc.gov/salt/pdfs/Sodium QandA.pdf

Sodium: The Facts. Centers for Disease Control, Heart Disease and Stroke Prevention. Published April 2010.

Fact sheet describing how an increased sodium intake can increase blood pressure, including facts about sodium within the American food supply.

Free PDF download.

http://www.cdc.gov/salt/pdfs/Sodium Fact Sheet.pdf

Americans Consume Too Much Sodium (Salt). Centers for Disease Control and Prevention (CDC), National Center for Chronic Disease Prevention and Health Promotion, Division for Heart Disease and Stroke Prevention. CDC Features, last updated February 24, 2011.

Data and statistics showcasing increased rates of cardiovascular disease from processed and restaurant foods and support for decreasing sodium intake to save lives.

Available online.

http://www.cdc.gov/features/dssodium/







Patient Education

Where's the Sodium? Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division for Heart Disease and Stroke Prevention, *Vital Signs*. Published February 2012.

Comprehensive overview of reasons for sodium reduction, where sodium is in our food and diets, and resources for making and promoting change.

Free PDF download.

http://www.cdc.gov/VitalSigns/pdf/2012-02-vitalsigns.pdfv

Sodium: Q&A. Centers for Disease Control, Heart Disease and Stroke Prevention. Published May 2010.

Answers general questions about sodium reduction (for health care providers and patients).

Free PDF download.

http://www.cdc.gov/salt/pdfs/Sodium QandA.pdf





Sodium: The Facts. Centers for Disease Control, Heart Disease and Stroke Prevention. Published April 2010.

Describes how an increased salt/sodium intake can increase blood pressure, a description of salt/sodium and facts about sodium within the American food supply.

Free PDF download.

http://www.cdc.gov/salt/pdfs/Sodium Fact Sheet.pdf

Reducing Sodium in Your Diet to Help Control Your Blood Pressure. Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division for Heart Disease and Stroke Prevention. Accessed October 10, 2012.

Overview tip sheet for things one can do to reduce dietary sodium, including eating more fresh foods, buying low sodium, and using spices and herbs.

Free PDF available.

http://www.cdc.gov/salt/pdfs/Reducing Sodium Diet BP Control.pdf

Salt Stats. Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division for Heart Disease and Stroke Prevention. Published May 2011.

Fact sheet of salt facts from salt in our diets to recommended limits and cost of related cardiovascular disease.

Free PDF download.

http://www.cdc.gov/salt/pdfs/Salt Stats Media.pdf

Get the Facts: Sodium Reduction Tips. Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division for Heart Disease and Stroke Prevention. Published August 2011.

Fact sheet presenting tips for reducing sodium highlighting simple and small changes with big impact.

Free PDF download.

http://www.cdc.gov/salt/pdfs/Sodium Tip Sheet.pdf

Get the Facts: Sources of Sodium in Your Diet. Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division for Heart Disease and Stroke Prevention. Published June 2012.

Fact sheet identifying most common sources of sodium in our diets, including surprising sources and ways to cut back.

Free PDF download.

http://www.cdc.gov/salt/pdfs/Sources of Sodium.pdf











Get the Facts: The Role of Sodium in Your Food. Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division for Heart Disease and Stroke Prevention. Published June 2012.

Focus on the role of sodium in our foods, including how and why sodium is used in food manufacture and processing and sodium level comparison by country.

Free PDF available.

http://www.cdc.gov/salt/pdfs/Role of Sodium.pdf

Get the Facts: Sodium's Role in Processed Food. Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division for Heart Disease and Stroke Prevention. Published June 2012.

Review of sodium and use in processed foods with definitions of processed foods and recommendations for sodium reduction.

Free PDF available.

http://www.cdc.gov/salt/pdfs/Sodium Role Processed.pdf

Why Should I Limit Sodium? American Heart Association and American Stroke Association. Published 2012.

Question and answer handout that answers common patient questions regarding sodium reduction and what they can do, includes space for patient to write down their own questions to ask their doctor.

Free PDF download.

http://www.heart.org/idc/groups/heart-public/@wcm/@hcm/documents/downloadable/ucm 300625.pdf

Get Smart About Salt. American Dietetic Association, Nutrition Fact Sheet. Published 2007.

Flyer discusses health benefits for reducing salt without reducing taste and flavor, and gives an easy recipe for example of flavoring without salt.

Free PDF download.

http://www.wellnessproposals.com/nutrition/nutrition_fact_sheets/get_smart_about_salt.pdf

Health Bulletin: Cut the Salt! – New York City Department of Health and Mental Hygiene *Health Bulletin* 8(5)5. Revised October 2010.

Tips for people who want to reduce their salt/sodium consumption. Includes photographs detailing how to read a food label.

Free PDF available.

http://home2.nyc.gov/html/doh/downloads/pdf/public/dohmhnews8-05.pdf











How to Follow a Low-Sodium Diet. The Heart Failure Society of America (HFSA). Reprinted 2006.

Describes a low-sodium diet and provides steps to keep you on track. Includes a listing of foods high/low in sodium.

Free PDF download.

http://www.hfsa.org/pdf/module2.pdf

Lifestyle Changes to Make to Lower Blood Pressure – Without Medication. The Dietician Center. Accessed October 2012.

Lists behaviors a person can change to lower blood pressure. Contains information about food labeling and has a salt-free seasoning guide.

Available online.

www.dietitiancenter.com/sodium.aspx

DASH Diet Fact Sheet. The Dietician Center. Accessed October 2012.

Guide to the Dietary Approaches to Stop Hypertension (DASH) diet with quick tips for use in shopping for healthful, low sodium foods.

Free PDF download.

http://www.dietitiancenter.com/userfiles/files/pdf/dash_diet-fact-sheet.pdf

Reduce Sodium, Increase Potassium. Iowa State University Extension. Revised May 2009.

Explains how to find sodium on the Nutrition Facts Panel and explains the difference in definitions for "sodium free", "very low sodium", "low sodium" and reduced or less sodium on food labels. It also suggests alternatives for salt-free seasonings for different foods.

Free PDF download.

https://www.extension.iastate.edu/store/ItemDetail.aspx?ProductID=12118

Get Smart About Salt. American Dietetic Association, Nutrition Fact Sheet. Published 2007.

Flyer discusses health benefits for reducing salt without reducing taste and flavor, and gives an easy recipe for example of flavoring without salt.

Free PDF download.

http://www.wellnessproposals.com/nutrition/nutrition fact sheets/get smart a bout salt.pdf











Shaking Your Salt Habit. American Heart Association. (2008). Retrieved from KRAMES Patient Education (2010) website: www.krames.com.

Presents very easy to read and understand information about the need to reduce salt and sodium in the diet, including the DASH eating plan, sources of high and low sodium foods, and offers strategies for maintaining low sodium eating.

Order 50 brochures for \$69.65 (item #50-1627) from Krames/Staywell

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Low-Sodium Eating: Tips for Kicking the Salt Habit. Krames Patient Education.

Booklet with helpful, easy —to-follow tips for kicking the salt habit with recommendations on monitoring sodium and making healthier food choices.

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D9F27A1AEEDB8801797C3C73B255EACCB80C289BDBF&item=14072

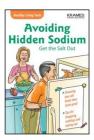


Avoiding Hidden Sodium: Get the Salt Out. Krames Patient Education. Accessed on October 10, 2012.

Informative booklet offering advice and suggestions for sodium reduction in line with the DASH diet and "Stages of Change" theory.

Order booklets for \$1.25 each from Krames/Staywell (also available in Spanish)

https://www.kramesstore.com/OA_HTML/ibeCCtpltmDspRte_kra.jsp?item=18844&JServSes
sionIdrootistore1=e4bbc4b921.olbOpR9zagTNr65TrQjGp2TxpQOUtxCLbx0Ka0-&dbprod_prod=qNYOV927CrR_FpmsnBvZgMP5:S&dbprod_prod_pses=ZG4ECA0C3559501C
EA1FADE54F090C2315BA8821183CEBC8EA3E73F223260EF2E0F106E926FF0222A76ACF290
5AD8DF668B1C4F7C7F3D7B05328427A4811DF67BF



Salt and Sodium: 10 Tips to Help You Cut Back. US Department of Agriculture, Center for Nutrition Policy and Promotion. Published June 2011.

Factsheet providing ten easy to do and impactful tips to reduce sodium in the diet.

Free PDF available.

http://www.choosemyplate.gov/foodgroups/downloads/TenTips/DGTipsheet14SaltAndSodium.pdf



Too Much Salt Can Lead to Heart Attack and Stroke. Commonwealth of Massachusetts Department of Public Health. Accessed October 10, 2012.

Handout identifying common foods with high sodium content with recommendations for choosing options lower in sodium to reduce consumption.

Free PDF available.

http://www.mass.gov/eohhs/docs/dph/mass-in-motion/sodium-fact-sheet.pdf



Shocking Salt-tistics. Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division for Heart Disease and Stroke Prevention. Accessed October 10, 2012.

Identifies hidden sources of salt in our diet and small changes that can make a big difference in efforts to reduce salt intake.

Free PDF available.

http://www.cdc.gov/salt/pdfs/Salt-tistics.pdf

Sold-tissue

Sold-

WHAT'S IN THE Nutrition Label?

What's In the Nutrition Label? Eat Smart, Move More NC. Accessed October 10, 2012.

Easy to read and understand graphic handout that leads reader through the process of identifying key information on a nutrition label.

Free PDF available.

http://www.eatsmartmovemorenc.com/MotivationalPosters/Texts/ES Poster1.pdf

The Label Language. Eat Smart, Move More NC. Accessed October 10, 2012.

Identifies and defines key terms and phrases used on nutrition labels and in food marketing.

Free PDF available.

http://www.eatsmartmovemorenc.com/MotivationalPosters/Texts/ES Poster5.pdf

The Label Language

The La

Sodium: Tips for Peoples with Chronic Kidney Disease (CKD). National Kidney Disease Education Program. Revised September 2011.

Fact sheet regarding sodium reduction tailored for kidney disease patients with useful tips for all.

Free PDF available.

http://www.nkdep.nih.gov/resources/nutrition-sodium-508.pdf

Talk With Your Health Care Provider About High Blood Pressure, US Department of Veteran Affairs, US Department of Health and Human Services, Agency for Healthcare Research and Quality (AHRQ), and US Preventive Services Task Force. Published April 2009.

Details risks of high blood pressure, how to interpret blood pressure readings, and tips for controlling high blood pressure, including reducing salt/sodium in diet.

Free PDF download.

http://www.prevention.va.gov/docs/AHRQ Partnership Health/HBP patientF.pdf

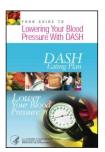


Your Guide to Lowering Your Blood Pressure with DASH, Department of Health and Human Services, National Institute of Health, National Heart, Lung, and Blood Institute. Published April 2006.

Acts as patient guide to the Dietary Approaches to Stop Hypertension (DASH) eating plan with sample menus and recommendations for healthy eating and physical activity.

Free PDF download.

http://www.nhlbi.nih.gov/health/public/heart/hbp/dash/new_dash.pdf

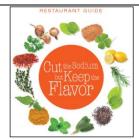


Cut the Sodium but Keep the Flavor – Restaurant Guide. Healthy Dining Finder.

Toolkit aimed at restaurant owners but helpful for consumers, identifying specific strategies to reduce sodium in selection and preparation of foods.

Available online.

http://www.healthydiningfinder.com/restaurant-partners/Nutrition-Services



Sodium Content of Foods. Nutrition Graphics. Revised 2011.

Double-sided graphic handout that provides extensive overview of sodium content of foods, including items from all food groups and menu examples from restaurants.

Order 1-99 for \$0.63 each from Nutrition Graphics.

http://www.nutritiongraphicscatalog.com/cart/product info.php?products id=37



Sodium: How to tame your salt habit now. Mayo Clinic Staff. Published March 31, 2011.

Describes why sodium is beneficial to the body (when used in moderation). Discusses how to find ingredients within food that may signal that they are high in sodium.



Available online.

http://www.mayoclinic.com/health/sodium/NU00284

Tips to Lower Blood Pressure. Sara Broek. Better Homes and Gardens. Accessed October 9, 2012.

Presents tips for lowering blood pressure, including identification of reduction in dietary sodium to meet current guidelines.

Available online.

http://www.bhg.com/health-family/conditions/high-blood-pressure/tips-to-lower-blood-pressure/#page=1



Sodium-Saturated Diet is a Threat for All. Jane E Brody. The New York Times. Published December 26, 2011.

Reports on the need for sodium reduction as means to lower risk of developing heart disease.

Available online.

http://www.nytimes.com/2011/12/27/health/high-sodium-to-potassium-ratio-in-diet-is-a-major-heart-risk.html#

Sodium – Taking Down a Sneaky Killer. Elizabeth M (Libby) Puckett. National Forum for Heart Disease and Stroke Prevention.

Discusses the role of sodium in our food consumption and details current initiatives aiming to reduce sodium consumption and content in processed foods.

Available online as Word document.

http://www.startwithyourheart.com/Default.aspx?pn=Literature





Additional Resources

Media

Sodium Reduction: Time for Choice, Video presentation. Centers for Disease Control and Prevention (CDC), Presentation given at the Public Health Grand Rounds presentation, April 21, 2011. Uploaded by CDC Streaming Health on April 22, 2011.

Full broadcast of the Health Grand Rounds presentation detailing need for individual and population-based sodium reduction efforts with great information on current sodium status, role of food procurement, etc.

Presentation slides available above in Provider Education.

Available online.

http://www.youtube.com/watch?v=PYg051t9hGs

Salt Matters: Preserving Choice, Protecting Health. Video. Centers for Disease Control and Prevention. Released

Video outlining ways that Americans can make healthier food choices and reduce sodium intake. 2011 W³ Silver Award winner. (Short and extended versions also available.)

Available online.

http://www.cdc.gov/salt/resources.htm





Don't Blame the Salt Shaker. Video. Sodium Savvy Schenectady County. Published June 5, 2012.

Video highlighting common sources of sodium beyond the salt shaker with recommendations in line with the 2010 dietary guidelines.

Available online.

http://www.youtube.com/watch?v=kHNtPdTkazc

Lowering Your Sodium Could Improve Your Health. E-card. Centers for Disease Control and Prevention. Last updated March 28, 2012.

E-card greeting users are able to send to friends, family, and others that advise of the health benefits of reducing sodium intake.

Available online.

http://t.cdc.gov/ecards/message.aspx?cardid=284&category=173

More to Consider Than the Salt Shaker. Podcast series: A Cup of Health with CDC. Created July 1, 2010 by Morbidity and Mortality Weekly Report. Centers for Disease Control and Prevention. Released July 1, 2010.

Broadcast reporting on CDC study finding that 90% of Americans consume too much salt, mostly obtained from processed foods.

Available online.

http://www2c.cdc.gov/podcasts/player.asp?f=2076041

Living a Less Salty Life. Podcast series: A Minute of Health with CDC. Created 3/28/12 by Morbidity and Mortality Weekly Report. Centers for Disease Control and Prevention. Released April 2, 2009.

Broadcast discusses how people can improve their health by becoming aware of the salt content in their food.

Available online.

http://www2c.cdc.gov/podcasts/player.asp?f=11113

Heart Disease and Stroke in Women. Podcast series: Women's Health. Created 5/141/2009 by Office of Women's Health (OWH) and National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP). Released 5/11/2009.

Broadcast discussing women's health in regards to heart disease and stroke with emphasis on sodium reduction on key modifiable risk factor.

Available online.

http://www2c.cdc.gov/podcasts/player.asp?f=11506

Too Much Salt Can Be Risky PSA. Centers for Disease Control and Prevention. Public Service Announcement (PSA) series: CDC Radio. Released January 28, 2010.

Broadcast highlighting health dangers associated with excess sodium.

Available online.

http://www2c.cdc.gov/podcasts/player.asp?f=760255













Facilitators of and Barriers to Implementing a Local Policy to Reduce Sodium Consumption in the County of Los Angeles Government, California, 2009. Lauren Gase, MPH; Tony Kuo, MD, MSHS; Diane O. Dunet, PhD; Paul A. Simon, MD, MPH; Preventing Chronic Disease 8(2). Published March 2011.

The report on an original qualitative study that explores facilitators and barriers to a proposed foot procurement policy with conclusions that such policies represent a feasible strategy to reduce population sodium consumption.

Free PDF available.

http://www.cdc.gov/pcd/issues/2011/Mar/pdf/10 0060.pdf

Salt Intake, Stroke, and Cardiovascular Disease: Meta-Analysis of Prospective Studies. Pasquale Strazzullo, Lanfranco D'Elia, Ngianga-Bakwin Kandala, and Francesco P Cappuccio. *British Medical Journal* 339: b4567. 2009. Published November 24, 2009.

Research review assessing the relationship between the level of habitual salt intake and stroke or total cardiovascular disease outcome.

Free PDF download.

http://www.bmj.com/highwire/filestream/398814/field highwire article pdf/0/bmj.b4567

Sodium Reduction and Its Effects on Food Safety, Food Quality, and Human Health-a Brief Review of the Literature. M. Ellin Doyle, PhD, Food Research Institute, University of Wisconsin-Madison. Food Research Institute Briefing. Published November 2008.

Research review that identifies salt in relation to potential health benefit and health threat in excess quantities such as currently consumed in processed and mass prepared foods.

Free PDF download.

http://fri.wisc.edu/docs/pdf/FRI Brief Sodium Reduction 11 08.pdf







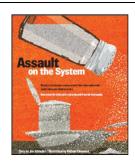
News Articles

Assault on the System. Jim Schnabel. *Johns Hopkins Public Health* magazine Fall 2010, pages 18-21. Published Fall 2010.

A diverse account for the role of salt in the diet and the harms of excessive sodium consumption and need for policy-based change.

Free PDF available.

http://magazine.jhsph.edu/2010/fall/features/assault on the system/page 1/index.html



The Salt you Never See. Wellmark Blue Cross and Blue Shield. *Blue* magazine. Published Spring 2010.

A description of how much sodium is needed in comparison to how much sodium is in processed foods. Contains great tips to lower sodium intake while cooking at home or eating at a restaurant.

Free PDF download.

http://www.wellmark.com/Member/UsingBenefits/Docs/BlueMag/MedSupp/SeniorBlue Summer10 IA.pdf

FDA Should set Standards for Salt added to Processed Foods, Prepared Meals. The National Academies. Published April 20, 2010.

A news release written by The National Academies requesting that the Food and Drug Administration should set standards to gradually reduce the amount of salt/sodium within many processed and prepared meals.

Available online.

http://www8.nationalacademies.org/onpinews/newsitem.aspx?RecordID =12818



Omaha a

Highs and Lows of Sodium Content. *Omaha World Herald.* Published January 27, 2010.

Listing of common restaurant and store bought foods with their sodium content.

Available online.

http://www.omaha.com/apps/pbcs.dll/article?AID=/20100127/LIVING/701279929

II/article?AID=/20100127/LIVING/7

Chefs Love Salt – Too Much and Not Well. By Josh Ozersky. *Time Magazine*. Published May 17, 2010.

Candid discussion of the amount of salt in American diet due to processed foods and restaurant dining.

Available online.

http://www.time.com/time/magazine/article/0,9171,1987591,00.html



Websites

American Heart Association/American Stroke Association

- AHA Homepage <u>www.americanheart.org</u>
- ASA Homepage <u>www.strokeassociation.org</u>
- Go Red for Women http://www.goredforwomen.org/
- •

Centers for Disease Control and Prevention

- Salt and Sodium Reduction http://www.cdc.gov/salt
- Division for Heart Disease and Stroke Prevention http://www.cdc.gov/dhdsp/





Food and Drug Administration

- Lowering Salt in Your Diet http://www.fda.gov/ForConsumers/ConsumerUpdates/ucm1815 77.htm
- Food Labels Help Consumers Make Healthier Choices http://www.fda.gov/ForConsumers/ConsumerUpdates/ucm0945 36.htm



Health Information Network (HIN)

Latest news on sodium reduction http://hp2010.nhlbihin.net/joinhin/news/professional/Pro DASH Update.htm



National Heart Lung and Blood Institute

- Healthy Eating http://www.nhlbi.nih.gov/hbp/prevent/h eating/h eating.htm
- National High Blood Pressure Education Program http://www.nhlbi.nih.gov/about/nhbpep/index.htm
- Reduce salt and sodium in your diet http://www.nhlbi.nih.gov/hbp/prevent/sodium/sodium.htm



The National Salt Reduction Initiative (NSRI)

Effort coordinated by the New York City Health Department http://www.nyc.gov/html/doh/html/cardio/cardio-saltinitiative.shtml



United States Department of Agriculture

- What's in Food? Salt and Sodium http://riley.nal.usda.gov/nal display/index.php?info center=11& tax level=2&tax subject=388&topic id=1667&placement defaul t=0
- Choose My Plate http://www.choosemyplate.gov/



Mentors

Baltimore City's Salt Reduction Task Force Recommendations. (2009)

Report created by the Baltimore City Salt Reduction Task Force in 2009. Outlines their strategies to reduce deaths from cardiovascular disease through public and provider education, nutrition disclosure, citywide purchasing standards and community partnerships.



http://www.baltimorehealth.org/info/2009 09 30 SaltTaskForceReport. pdf

CASH - Consensus Action on Salt and Health

CASH is a group of specialists in the United Kingdom concerned with salt and its effects on health. The organization is working to reach a consensus with the food industry and Government over the harmful effects of a high salt diet, and bring about a reduction in the amount of salt in processed foods as well as salt added to cooking, and the table. http://www.actiononsalt.org.uk/



Iowa Department of Public Health – Heart Disease and Stroke Prevention Program

Iowa's cardiovascular (CV) programs partner with other statewide and department wellness initiatives. The Heart Disease and Stroke Prevention (HD&SP) program focuses on detection and treatment of risk factors; early identification and treatment of heart attacks and strokes; and prevention of recurrent cardiovascular events.



http://www.idph.state.ia.us/hpcdp/cardiovascular health.asp

New York City Department of Health and Mental Hygiene and the National Salt Reduction Initiative

Learn what New York City is doing to reduce sodium to keep their citizens healthy. Also contains information about the National Salt Reduction Initiative and ways to get involved.





Seattle/King County's Nutrition Labeling Project – Department of Public Health

The King County Board of Health's nutrition labeling regulation requires some chain food restaurants permitted by Public Health - Seattle & King County to provide calorie, saturated fat, carbohydrate and sodium information to customers.

http://www.kingcounty.gov/healthservices/health/nutrition/healthyeating/menu.aspx



Reference

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